TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions
Total Weight in g	3000

SIEVE ANALYSIS

Type of Material	40 mm down size	Proposed Use	PCC
Sample Location	At Site	Date of Sampling	04-05-19
		Date of Testing	04-05-19

IS Sieve Size	Weight Retained in gm	Cum. Weight Retained in gm	Cumulative Weight Retained in %	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA-2007) % of Passing For Graded Aggregate of Nominal Size
80.00mm	0	0	0.00	100.00	100
63.00mm	0	0	0.00	100.00	-
40.00mm	99	99	3.30	96.70	95-100
20.00mm	1468	1567	52.23	47.77	30-70
10.00mm	638	2205	73.50	26.50	10-35
4.75mm	720	2925	97.50	2.50	0-5
Pan	75	3000	100.00	0.00	

Remarks : ✓ Satisfactory / Not Satisfactory

29/2/2020

Consultant's Representative

TEJUS CONSULTANTS

Test Report on Cement

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. Sreenivas Constructions
Sample ID	Cement
Date of Sample Tested	04-05-19
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	36 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	380 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

29/5/2020

TEJUS
CONSULTANTS

TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	04-05-19
Period of Soaking	24 hours	Date of Testing	04-05-19

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	680	681	694	
B	Weight of oven - dry sample gm.	672	673	686	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1698	1698	1708	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.615	2.609	2.628	**2.617**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.190	1.189	1.166	**1.182**

TEJUS

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Material	Fine aggregate (River Sand/M sand)		Proposed Use	P.C.C	
Sample Location	At Plant/site		Date of Sampling	04-05-19	
			Date of Testing	04-05-19	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	210	210	7.00	93.00	90 - 100
2.36 mm	280	490	16.33	83.67	75 - 100
1.18 mm	520	1010	33.67	66.33	55 - 90
0.600 mm	480	1490	49.67	50.33	35 -59
0.300 mm	800	2290	76.33	23.67	8-30
0.150 mm	580	2870	95.67	4.33	0 - 10
Pan	130	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. Sreenivas Constructions	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	Proposed Use	Concrete	
Sample Location	At Plant	Date of Samplin	16-05-19	
		Date of Testing	16-05-19	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	265	265	2.65	97.35	95 - 100
10.00 mm	4958	5223	52.23	47.77	25 - 55
4.75 mm	4325	9548	95.48	4.52	0 - 10
Pan	452	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

KSB
Srinivasa
T. Nanjunda 22/2/2020

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. Sreenivas Constructions	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	CONCRETE	
Sample Location	Plant		Date of Sampling	16-05-19	
			Date of Testing	16-05-19	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	575	575	5.75	94.25	90-100
10.0	3348	3923	39.23	60.77	40-85
4.75	5482	9405	94.05	5.95	0-10
Pan	595	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No 08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	16-05-19
Period of Soaking	24 hours	Date of Testing	16-05-19

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	662	660	670	
B	Weight of oven - dry sample gm.	654	652	661	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1693	1691	1692	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.680	2.672	2.613	**2.655**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.223	1.227	1.362	**1.271**

TEJUS

TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Materia	Fine aggregate (River Sand/M sand)		Proposed Use	Concrete	
Sample Location	At Plant/site		Date of Sampling	16-05-19	
			Date of Testing	16-05-19	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	238	238	7.93	92.07	90 - 100
2.36 mm	272	510	17.00	83.00	75 - 100
1.18 mm	510	1020	34.00	66.00	55 - 90
0.600 mm	540	1560	52.00	48.00	35 -59
0.300 mm	658	2218	73.93	26.07	8-30
0.150 mm	550	2768	92.27	7.73	0 - 10
Pan	232	3000			-
Remarks :		✓	Satisfactory / Not Satisfactory		

Consultant's Representative

Test Report on Cement	
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. Sreenivas Constructions
Sample ID	Cement
Date of Sample Tested	16-05-19
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	36 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	380 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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TEJUS
CONSULTANTS

Test report on Compressive strength of concrete cubes

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. Sreenivas Constructions
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	16-05-19	23-05-19	7 days	8.822	22500	298	13.24	13.24
2	16-05-19	23-05-19	7 days	8.865	22500	300	13.33	
3	16-05-19	23-05-19	7 days	8.722	22500	296	13.16	

TEJUS
CONSULTANTS

Test report on Compressive strength of concrete cubes								
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08							
Client	Bruhat Bangalore Mahanagar Palike							
Consultant	TEJUS CONSULTANTS							
Contractor	Sri. Sreenivas Constructions							
Location:	Cement							
Grade of concrete:	M20							
Size of cube:	150x150x150 mm							
Reference IS code:	IS:516-1959							
Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	16-05-19	13-06-19	28 days	8.582	22500	450	20.00	20.04
2	16-05-19	13-06-19	28 days	8.762	22500	452	20.09	
3	16-05-19	13-06-19	28 days	8.560	22500	451	20.04	

TEJUS
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TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	Sri. Sreenivas Constructions				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		Proposed Use	Concrete	
Sample Location	At Plant		Date of Samplin	17-05-19	
			Date of Testing	17-05-19	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	272	272	2.72	97.28	95 - 100
10.00 mm	4658	4930	49.30	50.70	25 - 55
4.75 mm	4532	9462	94.62	5.38	0 - 10
Pan	538	10000			
Remarks :	✓ Satisfactory / Not Satisfactory				

Consultant's Representative

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TEJUS

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. Sreenivas Constructions	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size	Proposed Use	CONCRETE
Sample Location	Plant	Date of Sampling	17-05-19
		Date of Testing	17-05-19

IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	585	585	5.85	94.15	90-100
10.0	3358	3943	39.43	60.57	40-85
4.75	5498	9441	94.41	5.59	0-10
Pan	559	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS
CONSULTANTS

TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	17-05-19
Period of Soaking	24 hours	Date of Testing	17-05-19

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	632	651	678	
B	Weight of oven - dry sample gm.	624	643	669	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1673	1688	1698	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.667	2.702	2.624	**2.664**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.282	1.244	1.345	**1.291**

TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. Sreenivas Constructions

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Materia	Fine aggregate (River Sand/M sand)		Proposed Use	Concrete	
Sample Location	At Plant/site		Date of Sampling	17-05-19	
			Date of Testing	17-05-19	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	235	235	7.83	92.17	90 - 100
2.36 mm	280	515	17.17	82.83	75 - 100
1.18 mm	410	925	30.83	69.17	55 - 90
0.600 mm	568	1493	49.77	50.23	35 -59
0.300 mm	750	2243	74.77	25.23	8-30
0.150 mm	530	2773	92.43	7.57	0 - 10
Pan	227	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

09/07/2020

Test Report on Cement

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. Sreenivas Constructions
Sample ID	Cement
Date of Sample Tested	17-05-19
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	40 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	375 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	28.00%	

TEJUS
CONSULTANTS

Test report on Compressive strength of concrete cubes

Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. Sreenivas Constructions
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	17-05-19	24-05-19	7 days	8.813	22500	294	13.07	13.10
2	17-05-19	24-05-19	7 days	8.868	22500	295	13.11	
3	17-05-19	24-05-19	7 days	8.723	22500	295	13.11	

TEJUS
CONSULTANTS

Test report on Compressive strength of concrete cubes								
Project	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08							
Client	Bruhat Bangalore Mahanagar Palike							
Consultant	TEJUS CONSULTANTS							
Contractor	Sri. Sreenivas Constructions							
Location:	Cement							
Grade of concrete:	M20							
Size of cube:	150x150x150 mm							
Reference IS code:	IS:516-1959							
Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	17-05-19	14-06-19	28 days	8.581	22500	449	19.96	20.07
2	17-05-19	14-06-19	28 days	8.785	22500	454	20.18	
3	17-05-19	14-06-19	28 days	8.554	22500	452	20.09	

TEJUS
CONSULTANTS

PRECAST SLAB (CORE) TEST REPORT

Client	:	Bruhat Bangalore Mahanagara Palike
Contractor	:	Sri. Sreenivas Constructions
Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
No.of Sample Tested	:	3
Date of Testing	:	25-05-2019
Techinical Reference	:	IS:516-1959 (Reaffirmed 1999), SP-24:1983.
Grade of Concrete	:	M_{20}, 100mm thick

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	90.00	0.462	2614.39	1.80	0.960	38.10	19.40	20.96	20.12	25.15
2	50.00	90.00	0.459	2597.41	1.80	0.960	37.98	19.34	20.89	20.05	25.07
3	50.00	90.00	0.450	2546.48	1.80	0.960	38.10	19.40	20.96	20.12	25.15

Note:

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2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported reported within 15days from the date of testing.

TEJUS CONSULTANTS

Consultant's Representative

29/02/2020

TEJUS
CONSULTANTS

KERB STONE (CORE) TEST REPORT

Name of Work	:	Improvement to Roads and Drains in Bhadrappa Layout and Surrounding area in Ward No.08
Client	:	Bruhat Bengaluru Mahanagara Palike
Contractor	:	Sri. Sreenivas Constructions
Consultant	:	TEJUS CONSULTANTS Basaveshwara Nagar Bangalore
No.of Sample Tested	:	3
Date of Testing	:	25-05-19
Techinical Reference	:	IS:516-1959 (Reaffirmed 1999), SP-24:1983.
Grade of Concrete	:	M_{15}

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength
1	50.00	85.00	0.386	2312.80	1.70	0.960	28.74	14.64	15.81	15.18	18.97
2	50.00	85.00	0.382	2288.84	1.70	0.960	28.64	14.59	15.75	15.12	18.90
3	50.00	85.00	0.386	2312.80	1.70	0.960	28.68	14.61	15.78	15.14	18.93

Note:

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Consultant's Representative